For Lack of a Cotter Pin

By Cdr. Glen Hansen

It was a beautiful spring day, slightly cool and clear all the way to the warning area. I was assigned a PMCF "C" flight after a phase inspection. It wasn't supposed to be an exciting flight, but it sure turned into one.

My trusty Hornet came out of phase early that morning. Maintenance had replaced the trailing-edge flaps, which created the need for a Pro "C." They also did an airframes bulletin against the main-landing-gear axle.

I had flown the night before and had arrived home around 2300. A new pilot was to check-in the next morning, so I got up early to arrive at work at 0730. I wanted to give him an SOP brief and sign him off to fly squadron aircraft. I waited until late afternoon for the aircraft to come up.

As the day inched toward 1600, I became restless. The previous late-night arrival, coupled with early reveille, made me look forward to getting home earlier that evening. I also knew I needed to do this Pro to have enough jets available to start SFARP flights the next morning. Maintenance called and asked if 9,000 pounds of fuel would be enough for the flight. Feeling the time crunch and knowing that a "C" profile did not require a lot of time or fuel, I accepted the fuel load, rather than wait for a truck or a trip through the pits.

The initial part of the flight went without a hitch. I did the Pro and headed back to the field, arriving overhead with about 2,700 pounds (squadron SOP dictates 2,000 pounds on deck during the day). Tower threw me a curve and directed a right break because the left pattern was full. No problem, I thought; a fire-breathing Hornet guy and a Navy fighter can turn right—contrary to popular belief. I waited until the downwind and 220 knots before I threw down the gear. It was only a moment before I realized I had not felt that satisfying thump, thump, thump, which was evidence the gear was down. Looking at the gear indicator, my nose gear and right main

showed down-and-locked, but the left did not. Oh boy, that wasn't right!

I climbed to 2,500 feet and entered a right hand delta pattern over the field. I started going through the PCL and called base to pull out the big blue sleeping pill. I traced the steps from positive to negative G, cycling the gear handle, and trying to blow down the gear. As I talked with my SDO, a Hornet from another squadron joined me and began to coordinate with tower, and an LSO who was controlling aircraft on the left runway. He also was able to watch my gear cycle. With the gear handle up, all the gear were up, and the doors were closed. With the handle down, the nose and right main came down, but the left main-gear door opened only two inches before jamming. I had a big problem.

The 15 minutes of troubleshooting cost me fuel; I was down to 1,500 pounds. Having attempted all NATOPS steps, I cut off the SDO after his brief about landing with one main gear up and set up for a straight-in. My impromptu wingman coordinated the arrested landing, departed my wing, and landed on the other runway.

Lining up on the runway, I set up a minimum-rate-of-descent landing and aimed the aircraft at the arresting gear. The LSO told me my tailhook was not down. Calling it out on the radio, I had just enough time to drop the hook and catch the wire. The airplane rolled left, settled on the port wing, but remained on the runway.

We had to replace the left aileron, to repair the left trailing-edge flap, and to patch up the LAU-7. But we returned the aircraft to flight status in no time at all.

The investigation revealed maintainers had left out a cotter pin on the main-landing-gear-door strut. A nut had worked loose (maybe during the gear-blow-down checks), and the gear door had jammed.

This incident proved that crew coordination is alive and well in the single-seat community. The SDO provided clear guidance on troubleshooting. My impromptu wingman gave extraordinary help in coordination with tower and the LSO. His help let me concentrate on troubleshooting and allowed me to complete NATOPS steps while I coordinated the landing. The LSO, by noticing the tailhook, saved the aircraft from more severe damage.

Cdr. Hansen wrote this article as a department head with VFA-87. He is now on an exchange assignment in the U.K.